



# ELECTRICAL CURRENTS

Newsletter from the Office of the Chief Electrical Inspector

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## SPECIAL EDITION

### ● WAC RULE CHANGES EFFECTIVE NOVEMBER 25, 2005. UNDERSTAND CLASS B

The interim rule changes will become effective November 25, 2005. The complete text of these revisions is on our Web site at: <http://www.lni.wa.gov/TradesLicensing/Electrical/LawRulePol/default.asp>. These rule changes will help align inspection practices with different degrees of safety issues. **All articles in this special edition describing Class B installations have had the rule changes applied.**

### ● CLASS B ELECTRICAL INSPECTION LABELS --- EASY USE, COSTS \$10

Class B basic electrical work permits were created to **reduce the cost to the customer** while maintaining a acceptable level of inspection oversight. Class B labels are used for specific *“Electrical work that requires minimal electrical circuit modifications and has limited exposure hazards.”* The **definition** of Class B basic electric work is in RCW 19.28.006 and the **specific rules for use of Class B labels are found in WAC 296-46B-110(6) through (10)**. The labels are sold in books of 20 for \$200. After being purchased, the books may be split up and dispersed throughout the contractor's crews.

Each label has two parts; both parts must be filled out **before** the work is begun. The jobsite part must be affixed to the electrical panel, control panel, or equipment **before** starting the installation. The contractor part must be sent to the address printed on the bottom of the label within 15 working days from the use. Once filled out, the Class B label is an active permit and is subject to a random inspection.

### ● DID YOU KNOW?

Did you know that one class B permit may be used to install the low voltage wiring on an entire house or commercial building? Also, one Class B label may be used to extend a circuit, install a thermostat and change out a unit heater in a single house when all the work is done at the same time. When used for the specific work intended in the law and rules, Class B basic installation labels save time and money for contractors, their customers, and for the electrical program.

### ● WHAT CAN I USE CLASS B LABELS ON?

You can use Class B labels on the following **line voltage work where no cover inspection is necessary**:

- An extension of not more than one branch circuit.
- The circuit extension is limited to one hundred and twenty volts and twenty amps.
- The circuit extension shall supply no more than two outlets.
- An outlet in an extended circuit includes: General use snap switches/receptacles, luminaries, etc. It does not include wiring/cabling systems, isolating switches, magnetic contactors, motor controllers, etc.

**You can change out** the following items using a Class B permit (**“like in kind replacement”**):

- A single luminaire not exceeding two hundred seventy-seven volts and twenty amps.
- A motor larger than ten horsepower.
- The internal wiring of a furnace, air conditioner, refrigeration unit or household appliance.
- An electric/gas/oil furnace not exceeding 240 volts and 100 amps when the furnace is connected to an existing branch circuit. For the purposes of this section, a boiler is not a furnace.
- A unit heater, air conditioning unit or refrigeration unit not exceeding 240 volts, 30 minimum circuit amps when the unit is connected to an existing branch circuit.

- The **replacement** of not more than ten **standard** receptacles with **GFCI** receptacles.
- The **conversion** of not more than **ten snap switches to dimmers** for the use of controlling a luminaire(s).

Class B **low voltage systems** (T-stat, Security, Audio etc.) include the following:

- Repair and replacement of devices not exceeding one hundred volt-amperes in Class 2, Class 3, or power limited low voltage systems in one- and two-family dwellings.
- Repair and replacement of devices not exceeding one hundred volt-amperes in Class 2, Class 3, or power limited low voltage systems in other buildings, provided the equipment is **not for** fire alarm or nurse call systems and is not located in an area classified as hazardous by the NEC.
- The installation (**new work**) of **device(s) or wiring** for Class 2 or 3 thermostat, audio, security, burglar alarm, intercom, public address, or access control systems. This **does not include** fire alarm, nurse call, lighting control, industrial automation/control or energy management systems.
- The internal wiring of a furnace, air conditioner, refrigeration unit, or household appliance.
- Telecommunications cabling and equipment requiring inspection in RCW 19.28.470.

### ● HEAT CABLE REPAIR AND PREMANUFACTURED HEAT MATS

"Heat cable repair" and "premanufactured heat mats" in tile grout has been added to **Class A** basic electrical work (i.e. **work that doesn't require a permit**). The new rule WAC 296-46B-900(8)(D) states: *"Embedding pre-manufactured heat mats in tile grout where the mat is listed by an approved testing laboratory and comes from the manufacturer with pre-connected lead-in conductors. All listing marks and lead-in conductor labels must be left intact and visible for evaluation and inspection by the installing electrician and the electrical inspector."* This is now considered a Class A electrical installation. **The heat mat may be installed in the tile grout without a permit or inspection** by the tile setter. **The connections of the cable leads to the controlling device must be permitted by a licensed electrical contractor and installed by a licensed electrician.**

### ● REPEAT VIOLATORS MAY FACE HIGHER PENALTIES

A new paragraph has been added to WAC 296-46B-915. It states that: *"Continued or repeated violation may occur if the person, firm, partnership, corporation or other entity who violates a provision of chapter 19.28 RCW, chapter 296-46B WAC has received one or more written warnings of a similar violation within a one-year period."* This allows L&I to issue warnings for certain violations. However, if an entity continues to violate the law after a warning, a subsequent violation may be considered to be serious in nature and have a higher penalty.

### ● ARE ELECTRICIANS ALLOWED TO DO PLUMBING WORK?

A WAC change has clarified WAC-46B-920(2). It says *"All specialties listed in this subsection may perform the electrical work described within their specific specialty as allowed by the occupancy and location described within the specialty's scope of work. Except for Residential (02), the scope of work for these specialties **does not** include plumbing work regulated under chapter 18.106 RCW. See RCW 18.106. for plumbing exceptions for the Residential (02) specialty.* This clarification supports statutory requirements included in 18.27.090. **Only General electrical (01) and Residential (02) electricians may do incidental plumbing work.** The plumbing work must be directly and immediately related to the like in kind replacement of a household appliance that requires limited power and waste/water connections. An electrical trainee must be supervised by a certified electrician while performing plumbing work.

### ● CONTRACTORS: CHECK YOUR EMPLOYEES CERTIFICATION

To help avoid license and certification citations, contractors should check their employees' certification cards. Expired certificates of competency and trainee certification cards account for a large percentage of citations issued to employers and employees. In order to avoid costly citations, re-testing and late fees associated with expired certificates of competency and trainee cards, contractors should regularly check **all** employees' certification status.